

# Texas Instruments electronic calculator with memory

**TI-1025**



## **OPERATING INSTRUCTIONS**

Your portable memory calculator from Texas Instruments is designed to provide years of reliable service in solving your everyday arithmetic problems.

**Battery Information** — A standard 9-volt calculator/transistor battery (alkaline or zinc-chloride type) is recommended for maximum calculating time. Be sure to remove a battery immediately after it is discharged or when storing the calculator to prevent possible damage from leakage. To open the battery compartment, just insert a small coin in the slot on the back of the calculator and pry open the cover of the compartment.

**Optional AC Adapter** — The AC9180 Adapter is available from your dealer as an optional accessory to operate the calculator from 115 V/60 Hz electrical outlets. When the optional adapter is connected, the battery is automatically disconnected to conserve battery power for portable operation.

**For Service Information about your calculator,** write the Consumer Relations Dept., P.O. Box 53, Lubbock, Texas 79408. Or, call 800-858-1802 (toll-free within all joining 48 states except Texas) or 800-692-1353 (toll-free within Texas). If outside the United States, call 806-747-3841 (We regret that we cannot accept collect calls at this number.)

## **ARITHMETIC CALCULATIONS**

The entry system of the calculator allows a problem to be entered in the same order it is written. The calculator will indicate negative values by displaying a minus sign to the left of the number.

**Entering Numbers** — Numbers are entered by pressing the corresponding number key as you read each number in the normal left-to-right manner. Decimal fractions may also be entered by pressing  $\cdot$ . The decimal point is automatically positioned to the right of the last entered number if  $\cdot$  is not used. Up to 8 digits (7 digits for negative numbers) may be entered at a time and additional digit entries are ignored by the calculator. The leading zero counts as one digit when decimal fractions are entered, therefore, a maximum of 7 digits is possible to the right of the decimal point (6 digits for negative numbers).

**Turning on the Calculator and Clearing Calculations** — Your calculator has electronic on and off control by simply pressing the **ON** or **OFF** key. The **ON** key is also the Clear-Entry/Clear [CE/C] key. If you enter a number incorrectly, [CE/C] clears the last entered number providing no other function key has been pressed. This does not affect previous arithmetic entries or intermediate results. If [CE/C] is pressed twice, it clears all numbers and function entries. It is not necessary to press [CE/C] before starting a new problem if the last problem was completed with the  $=$  key. The [CE/C] key also clears a calculation overflow. The memory content is not affected by the [CE/C] key.

**Addition** — The add  $+$  key adds the last entered number or intermediate result to the number displayed when the next arithmetic function key or equals key is pressed.

Example:  $14 + 16.25 = = 30.25$

$14 + 16.25 = \Rightarrow 30.25$

The  $\Rightarrow$  symbol indicates the result displayed by the calculator after the key sequence to the left of the symbol has been pressed.

**Subtraction** — the subtract  $-$  key subtracts the next entered number from the displayed number when the next arithmetic function key or equals key is pressed.

Example:  $6 - 7.854 = -1.854$

$6 - 7.854 = \Rightarrow -1.854$

**Multiplication** — The multiply  $\times$  key multiplies the last entered number or intermediate result times the number displayed when the next arithmetic function key or equals key is pressed.

Example:  $27.2 \times 18 = 489.6$

$27.2 \times 18 = \Rightarrow 489.6$

**Division** — The divide  $\div$  key divides the last entered number or intermediate result by the number displayed when the next arithmetic function key or equals key is pressed.

Example:  $5 \div 3 = 1.6666666$

$5 \div 3 = \Rightarrow 1.6666666$

The four arithmetic function keys,  $+$ ,  $-$ ,  $\times$ ,  $\div$ , will each perform an equals operation and the calculator will display an intermediate result when used in multiple calculations. If any one of

these keys is pressed more than once in succession, the display will not be affected. However, repeated pressing of the  $=$  key is not ignored. The last function entry is reused by the calculator to perform an automatic constant calculation. (See *Calculations with a Constant*)

**Entering Negative Numbers** — The  $+/-$  key permits changing the sign of the displayed number from positive to negative or vice versa. This key may be used immediately after a number entry. However, when used immediately after  $+$ ,  $-$ ,  $\times$ ,  $\div$  or  $=$ , the minus sign displayed has no effect on the calculation in progress.

Example:  $5 \times (-4) = -20$

or  $5 \boxed{\times} \boxed{+/-} 4 \boxed{=} \Rightarrow 20$ . ( $+/-$  ignored)

$5 \boxed{\times} 4 \boxed{+/-} \boxed{=} \Rightarrow -20$ .

Note that only 7 digits can be displayed with a negative number. If the  $+/-$  key is used when 8 digits are displayed, one of two things will happen:

- 1) If there are any digits to the right of the decimal point, the right-most digit is lost and the remaining digits and decimal point shift one place to the right.
- 2) If all 8 digits are to the left of the decimal point, the calculator will indicate an error condition by displaying all E's. (See *Overflow/Error Indication*)

**Overflow/Error Indication** — An overflow/error indication (E.EEEEEEE) will appear in the display for the following reasons:

1. The result of a calculation has more than 8

digits to the left of the decimal for positive numbers or 7 digits for negative numbers. Press [CE/C] to clear calculation overflow.

2. The  $[\pm]$  key is pressed with 8 digits displayed to the left of the decimal point. Press [CE/C] to enter another problem.
3. Dividing a number by zero. Press [CE/C] to enter another problem.
4. The total in memory has more than 8 digits to the left of the decimal for positive numbers or 7 digits for negative numbers. Press **[MC]** to clear a memory overflow; then press [CE/C] to clear the calculator.

## **PERCENTAGE CALCULATIONS**

The percent **%** key only moves the decimal point two places to the left when used following multiplication or division. The **=** key must then be used to complete the percentage calculation. When following addition or subtraction, it automatically calculates the percentage for add-on or discount problems.

**Percentage Example:** 6% of \$1250 = \$75

$$1250 \times 6 \% = \Rightarrow 75.$$

**Ratio Example:** \$500 is what percent of \$1500?

$$500 \div 1500 \% = \Rightarrow 33.33333$$

**Add-On Example:** \$65 plus 5% tax = \$68.25

$$65 + 5 \% = \Rightarrow 68.25$$

**Discount Example:** \$85 less 7% discount = \$79.05

$$85 - 7 \% = \Rightarrow 79.05$$

## **Combination Example:**

\$129 less 15% discount plus 4% tax = \$114.04

$$129 \boxed{-} 15 \boxed{\%} \boxed{=} \boxed{+} 4$$

$$\boxed{\%} \boxed{=} \Rightarrow 114.036$$

## **CALCULATIONS WITH A CONSTANT**

Addition, subtraction, multiplication or division with a constant number is automatic. The SECOND number entered will be the constant for addition, subtraction, multiplication, division, and percentages.

Example:  $2 + 3 = 5$ ;  $4 + 3 = 7$

$$2 \boxed{+} 3 \boxed{=} \Rightarrow 5.$$

$$4 \boxed{=} \Rightarrow 7.$$

Example:  $8 - 6 = 2$ ;  $-3 - 6 = -9$

$$8 \boxed{-} 6 \boxed{=} \Rightarrow 2.$$

$$3 \boxed{+/-} \boxed{=} \Rightarrow -9.$$

Example:  $3 \times 8 = 24$ ;  $7 \times 8 = 56$

$$3 \boxed{\times} 8 \boxed{=} \Rightarrow 24.$$

$$7 \boxed{=} \Rightarrow 56.$$

Example:  $-27 \div 3 = -9$ ;  $15 \div 3 = 5$

$$27 \boxed{+/-} \boxed{\div} 3 \boxed{=} \Rightarrow -9$$

$$15 \boxed{=} \Rightarrow 5$$

Example:  $75 \times 10\% = 7.5$ ;  $125 \times 10\% = 12.5$

$$75 \boxed{\times} 10 \boxed{\%} \boxed{=} \Rightarrow 7.5$$

$$125 \boxed{=} \Rightarrow 12.5$$

The automatic constant is not designed to operate with percent add-on or discount.

## SAMPLE CALCULATIONS

Example:  $\frac{12 \times 13}{6} + 15 = 41$

$12 \boxed{\times} 13 \boxed{\div} 6 \boxed{+} 15 \boxed{=} \Rightarrow 41.$

Example:  $\frac{(3.75 - 57.8) \times 1.42}{-43.24} = 1.775$

$3.75 \boxed{-} 57.8 \boxed{\times} 1.42 \boxed{\div} 43.24 \boxed{+/-} \boxed{=} \Rightarrow 1.775$

Example:  $\frac{0.9 \times 1.6 - 0.5}{2.5 \times 0.2} = 1.88$

$.9 \boxed{\times} 1.6 \boxed{-} .5 \boxed{\div} 2.5 \boxed{\div} .2 \boxed{=} \Rightarrow 1.88$

The sequence  $\boxed{\times} \boxed{=}$  will square a number.

Example:  $(0.5 \times 15)^2 = 56.25$

$.5 \boxed{\times} 15 \boxed{\times} \boxed{=} \Rightarrow 56.25$

The automatic constant makes reciprocals easy.

Example:  $1/20 = 0.05$

$20 \boxed{\div} \boxed{=} \boxed{=} \Rightarrow 0.05$

The same sequence allows the reverse entry of numerator and denominator by entering the numerator before the last equals is pressed.

Example:  $6/(3.9 + 4.1) = 0.75$

$3.9 \boxed{+} 4.1 \boxed{\div} \boxed{=} 6 \boxed{=} \Rightarrow 0.75$

## MEMORY OPERATIONS

Any displayed number can be summed to or subtracted from memory without affecting calculations in progress. The number or result can then be recalled or cleared when necessary.

**Sum to Memory** — The **[M+]** key sums the displayed number to the memory.

**Subtract from Memory** — The **M-** key subtracts the displayed number from the memory.

**Memory Recall** — The **MR** key recalls a copy of the number in memory to the display without affecting the memory.

**Memory Clear** — The **MC** key clears only the memory.

Refer to *Overflow/Error Indications* for identification and control of a memory overflow.

### **Sum of Products**

Example:  $(4 \times 11.99) + (12 \times 0.98) = 59.72$

**MC** \* 4 **X** 11.99 **=** **M+** 12 **X** .98 **=** **M+**  
**MR**  $\Rightarrow$  59.72

### **Product of Sums**

Example:  $(2 + 3) \times (4 + 5) = 45$

**MC** \* 2 **+** 3 **=** **M+** 4 **+** 5 **X** **MR**  
**=**  $\Rightarrow$  45.

### **Product/Quotient of Sums**

Example: 
$$\frac{(2 + 1)}{(7 + 5) \times (6 + 4)} = 0.025$$

**MC** \* 7 **+** 5 **=** **M+** 6 **+** 4 **X** **MR** **=**  
**MC** **M+** 2 **+** 1 **÷** **MR** **=**  $\Rightarrow 0.025$

### **Sum of Quotients**

Example: 
$$\frac{1.98}{4} - \frac{4.98}{8} = -0.1275$$

**MC** \* 1.98 **÷** 4 **=** **M+** 4.98 **÷** 8 **=** **M-**  
**MR**  $\Rightarrow -0.1275$

\*Since **M+** and **M-** only add to or subtract from memory, **MC** should be used at the beginning of each new problem.

## SERVICE INFORMATION

### In Case of Difficulty

1. If using the adapter (AC9180), check for power at AC outlet and proper insertion of plug into calculator.
2. Check to be sure calculator is ON.
3. If display is erratic, dim or fails to light on battery operation, check for improperly inserted or discharged batteries. See *Battery Information* on page 1.
4. Review operating instructions to be certain calculations are performed correctly.

If none of the above procedures corrects the difficulty, return the **calculator (and adapter if you have one)** PREPAID and INSURED to the applicable SERVICE FACILITY listed on the next page. Texas Instruments cannot assume any responsibility for loss or damage to uninsured shipments.

Please include information on the difficulty experienced with the calculator, along with your **name, address, city, state, and zip code**. The shipment should be carefully packaged and protected against shock and rough handling.

For out-of-warranty service, enclose \$6.00 for service and handling and send to the appropriate service facility as described above.

## **CALCULATOR EXCHANGE CENTERS**

If your calculator requires service, instead of returning the unit to a service facility for repair, you may elect to exchange the calculator for a factory-rebuilt calculator of the SAME MODEL at one of the exchange centers which have been established across the United States. A \$3.00 charge will be made by the exchange center for in-warranty exchanges. Out-of-warranty exchanges will be charged at the rates in effect at the time of the exchange. Please call the Consumer Relations Department (page 1) for further details and the location of the nearest exchange center.

### **TEXAS INSTRUMENTS CONSUMER SERVICE FACILITIES**

**Texas Instruments Service Facility**  
P. O. Box 2500  
Lubbock, Texas 79408

**Texas Instruments Service Facility**  
41 Shelley Road  
Richmond Hill, Ontario, Canada

Consumers in California and Oregon may contact the following Texas Instruments Offices for additional assistance or information.

**Texas Instruments Consumer Service**  
3186 Airway Drive, Bldg. J  
Costa Mesa, California 92626  
(714) 540-7190

**Texas Instruments Consumer Service**  
10700 Southwest Beaverton Highway  
Park Plaza West, Suite 111  
Beaverton, Oregon 97005  
(503) 643-6758

**NOTE:** The P. O. Box number listed for the Texas Service Facility is for United States parcel post shipments only. If you desire to use another carrier, the street address is: Texas Instruments Incorporated, 2305 University Ave., Lubbock, Texas 79415

## ONE-YEAR LIMITED WARRANTY

**WARRANTEE:** This Texas Instruments electronic calculator warranty extends to the original purchaser of the calculator.

**WARRANTY DURATION:** This Texas Instruments electronic calculator is warranted to the original purchaser for a period of one (1) year from the original purchase date.

**WARRANTY COVERAGE:** This Texas Instruments electronic calculator is warranted against defective materials or workmanship. **THIS WARRANTY IS VOID IF:** (i) THE CALCULATOR HAS BEEN DAMAGED BY ACCIDENT OR UNREASONABLE USE, NEGLECT, IMPROPER SERVICE OR OTHER CAUSES NOT ARISING OUT OF DEFECTS IN MATERIAL OR WORKMANSHIP, (ii) THE SERIAL NUMBER HAS BEEN ALTERED OR DEFACED.

**WARRANTY PERFORMANCE:** During the above one (1) year warranty period your calculator will either be repaired or replaced with a reconditioned model of an equivalent quality (at TI's option) when the calculator is returned, postage prepaid and insured, to a Texas Instruments Service facility listed on the previous page. In the event of replacement with a reconditioned model, the replacement unit will continue the warranty of the original calculator or 90 days, whichever is longer. Other than the postage and insurance requirement, no charge will be made for such repair, adjustment, and/or replacement.

**WARRANTY DISCLAIMERS:** ANY IMPLIED WARRANTIES ARISING OUT OF THIS SALE, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE ABOVE ONE (1) YEAR PERIOD. TEXAS INSTRUMENTS SHALL NOT BE LIABLE FOR LOSS OF USE OF THE CALCULATOR OR OTHER INCIDENTAL OR CONSEQUENTIAL COSTS, EXPENSES, OR DAMAGES INCURRED BY THE PURCHASER.

Some states do not allow the exclusion or limitation of implied warranties or consequential damages, so the above limitations or exclusions may not apply to you.

**LEGAL REMEDIES:** This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

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